											DQA	i:Date	<u> </u>
NCR:	Yes	/ No				WORK ORDER NON-C	COI	NFOR	MANCE / UF	PDATE			
						-	,				QA Closed	l: Date):
Work Ord	oż.					DISPOSITION				AGAINST DE	PARTMEN	T/PROCESS	
WOIK OIU	ег.					Rework	1		Skid-tube	Crosstube	1	Water Jet	Engineering
Part I	No.					Scrap	1		Machining	Small Fab	Dr	od. Eng. Coor.	Quality
Falti	١٠٠.					Use-as-is	1	•	noforming	Finishing	4	ore/Packaging	Other
NCR I	Nα.		•			Work Order Update	1	•	Large Fab	Composite	1 1100,30	Supplier	- J
							,				J		
Root					Descri	ption of work order update		Initial	A	ction	Sign &		
Cause		Date	Step	Qty	C	or Non-conformance	Ct	nief Eng	Des	cription	Date	Verification	QC Inspector
Doc/Data					·								
Equip/Tooling						1	l					·	
Operator													
Material													
Setup			:			T.							
Other						1							
Process						1							
Supplier			ļ		:								
Training			1		ļ								ļ
Unapproved		<u> </u>				<u> </u>	L						
			· · ·				AUI	LT CATE	GORY			·	
Landi	ng (1				General		1			1		_
	<u></u>	Bending				Bend	<u>_</u>	Grain			Ovalized	<u>[</u> _	Pressure/Forced
	L	Centre N	ot Conce	ntric to	o/s	BOM/Route	\vdash	Hardwa		<u> </u>	4	r tolerance	Temperature/Cure
	$oxed{oxed}$	Cracks			<u> </u>	Broken/Damaged	\vdash	-i '	ion Incomplete	<u> </u>	Part Incorr	├	Weld
	<u> </u>	Crushed/	Crimped		L	Burrs	<u></u>	4	ions Incomplete	/Unclear	Part Lost/N	· ·	Wrong Stock Pulled
	L.	Cuffs				Contamination	\vdash	Mainte			Part Move		
	$ldsymbol{le}}}}}}$	Heat Trea	at			Countersink		Mislabe	eled	<u></u>	Positioned		¬
[1	Inspectio	n Strip in	Tube	1	Cut Too Short	1	Misread	i i		Power Loss	S/Surge	Other

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Order ID 99705 April-11-13 2:53:13 PM			Page 2						
Item ID: Revision ID: Item Name:	D3065-5 Step Leg			Accept	*N900	04010) 0*	Setup Start Stop	I C. VI
Start Date: Required Date: Reference:	4/22/13	Start Qty: 20.00 Req'd Qty: 20.00	*20* *20*		Cust Item l Customer:	ID:			
Approvals:	Process P	lan:	Date:	Tooling:	D	ate:		Run Start	"INK I"
	QC:		Date:	SPC (Y/N):	D	ate:		Stop	*NR2*
Sequence ID/ Work Center II	D	Operation Description Chemical Conversion Conversion	at per OSI005 4.1	Set Up/ Run Hours	Tool ID	Tool # Pla	le Qty	Qty	Reject Insp. Number Stamp
130 HandFinish Hand Finishing		Memo	, ,	0.00			30	Hal	5-5-B
140		QC Inspect Part Finish		0.00			30)	
140 QC Quality Control		Memo		0.00			50		
150		Identify as per dwg & Sto	ck Location: 6 A	0.00			30)	
150 Packaging Packaging		Memo		0.00				<u> </u>	75/05/

NCR:	Yes	/ No				WORK ORDER NON-	COI	NFORM	MANCE / UPDATE					
									· · · · · · · · · · · · · · · · · · ·		QA Closed:	D	ate:	
Work Ord	er: _					DISPOSITION	7		paramag	_	PARTMENT,			- · · □
Part I	•	W				Rework Scrap Use-as-is Work Order Update		f Therm	Skid-tube Crosstul Machining Small Finishi Large Fab Composi	ab ng	4	Water Je d. Eng. Coor re/Packagin Supplie	r. g	Engineering Quality Other
Root	T				Descri	ption of work order update		Initial	Action		Sign &			
Cause		Date	Step	Qty		or Non-conformance	Cr	nief Eng	Description		Date	Verificati	on	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved														
		<u> </u>					AUI	LT CATE	GORY					
Landi		Bending Centre No Cracks Crushed/ Cuffs Heat Trea Inspectio Ripples in	Crimped at n Strip in n Bend	Tube		General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes		Instruct Mainte Mislabe Misread Offset	on Incomplete ions Incomplete/Unclear nance led		Ovalized Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	ct ssing Vrong		Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
1	Torque Waves in Extrusion			Drawing		Jour or c	Januration							

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde <i>April-11-13 2:53</i>		0705		*997	' 05*							Page 3
Revision ID:	D3065-5 Step Leg			Accept	*N900	040	100)*	Setup	Start Stop		S1* S2*
Start Date: Required Date: Reference:	4/22/13 4/22/13	Start Qty: 20.00 Req'd Qty: 20.00	*20* *20*		Cust Item I Customer:	D:						
Approvals:	Process Pi	an:	Date:	Tooling: SPC (Y/N):		ite:			Run	Start Stop	*N *N	R1* R2*
Sequence ID/ Work Center ID 160 *160* QC Quality Control)	Operation Description QC21- Final Inspection - Memo	Work Order Release	Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accept Qty	t Rej		Reject Number	Insp. Stamp

N 13-05-7

NCR: Ye	es / No				WORK ORDER NON-C	CON	FORN	AANCE / UPD	DATE	·		
							-			QA Closed:	Date:	
Nork Orde	ř:				DISPOSITION				AGAINST DE	PARTMENT,		, _
Part No				· 	Rework Scrap Use-as-is Work Order Update		Therm	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	1	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
						<u>' </u>						J
Root Cause	Date	Step	Qty		ption of work order update or Non-conformance	l .	nitial ef Eng	Acti Descri		Sign & Date	Verification	QC Inspector
quip/Tooling Operator Material etup Other Process upplier raining												
						AULT	CATE	GORY				
Landin	Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion				General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing		nstructi Mainte Mislabe Misread Offset Out of C	on Incomplete ions Incomplete/U nance led Calibration	Inclear	Ovalized Over/Under Part Incorred Part Lost/Mi Part Moved Positioned W Power Loss/	ssing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
	Turning Sequence			i	Finish		Out of S	equence				

Outside Dimensions

DQA:

Date:

Wave/Twist in Tube

Picklist Print

April-11-13 2:53:13 PM

Page 1

Work Order ID:

99705

Parent Item:

D3065-5

Parent Item Name:

Step Leg

Start Date: 4/22/13

Required Date: 4/22/13

Start Qty: 20.00

Required Qty: 20.00

Comments:

IPP: C02.11.01Incorporated D3066-1 IPPKJ/RF IPP Rev:D Now on Water Jet 06-04-11 JLM

IPP Rev:E Now manufactured with 6061-T6 06-05-25 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Status Issued
M6061T6S.080 6061-T6 .080 Sheet		Purchased	No			100	sf	254.5600	0.825	17.368422		Jm13-5
				Location		Loc Qty	Lo	c Code				
				MAT021		254.560032						
				11728	35	0.497264						
				12478	36	254.062768			124	786		

											DQA:	Da	ate: _	
NCR: Y	Yes /	No			,	WORK ORDER NON-	COI	NFORM	MANCE / UPDATE					
									·		QA Closed:	Da	ate:	
Work Orde	në.		,			DISPOSITION			AGAIN	IST DE	PARTMENT	/PROCESS		
WOIK OIUE	=ı. —–					Rework	٦		Skid-tube Crosstu	امط	1 .	Water Jet	\Box	Engineering
Part N	Nο					Scrap	┨	,	Machining Small F	—	Pro	d. Eng. Coor.	\vdash	Quality
, , , , ,						Use-as-is	┪ :		noforming Finish	-	-}	re/Packaging	\vdash	Other
NCR N	No					Work Order Update	1		Large Fab Compos]	Supplier	_	
Root					Doscri	ption of work order update	1	Initial	Action		Sign &			
Cause		ate	Step	Qty		or Non-conformance		nief Eng	Description		Date	Verification	,	QC Inspector
Doc/Data		ate	Step	Qty	—	· ·		ner eng	Description	-	Date	Vermedie	"	Qe mapeetor
Equip/Tooling	H	ł					1					,		
Operator	H	ļ				•								
Material		Ì									İ		- 1	•
Setup														
Other														
Process														
Supplier				۔										•
Training				,g**	**		1							
Unapproved						1	<u>l</u>							
						F	AUI	LT CATE	GORY					
Landi	ng Gear	•				General		7		_	7			
	$oldsymbol{oldsymbol{ o}}$	nding				Bend	\vdash	Grain		<u> </u>	Ovalized		-	Pressure/Forced
1	⊢		t Concer	ntric to	o/s	BOM/Route	<u></u>	Hardwa		_	Over/Under	•	\vdash	Temperature/Cure
	Cra				<u> </u>	Broken/Damaged	\vdash	4 '	on Incomplete	-	Part Incorre		-	Weld
	\vdash		rimped		<u> </u>	Burrs	<u> </u>	4	ions Incomplete/Unclear	\vdash	Part Lost/Mi	ssing	Ш	Wrong Stock Pulled
(Cuf				 	Contamination	—	Mainte		\vdash	Part Moved			
	He	at Treat	t		1	Countersink	1	Mislabe	eled	1	Positioned V	Vrong		

Misread

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Other

Power Loss/Surge

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

DART AEROSPACE LTD	Work Order:	99705
Description: Step Leg	Part Number:	D3065-5
Inspection Dwg: D3065 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
16.458	+/-0.010	(6.458"	-		7	JLmoc
15.750	+/-0.005	(20,720),	-		T	
2.250	+/-0.005	5.523,	-		J	Jemoi
3.460	+/-0.005	3.4654	-		٧	
0.865	+/-0.005	0.869"	_		:,•	
6.020	+/-0.005	6.017"	-		U	
1.205	+/-0.005	1.206"	-		· Ü	
3.484	+/-0.005	3.485	_		V	
0.871	+/-0.005	0.874"	_		V	
8.325	+/-0.010	8,328"		- **	V	
0.551	+/-0.010	0.558*	_		ن	
0.213	+0.005/-0.000	0,2,4	-		υ	
Ø0.128	+0.005/-0.000	0.129°	_		J.	
					·	
					, .	
					·	

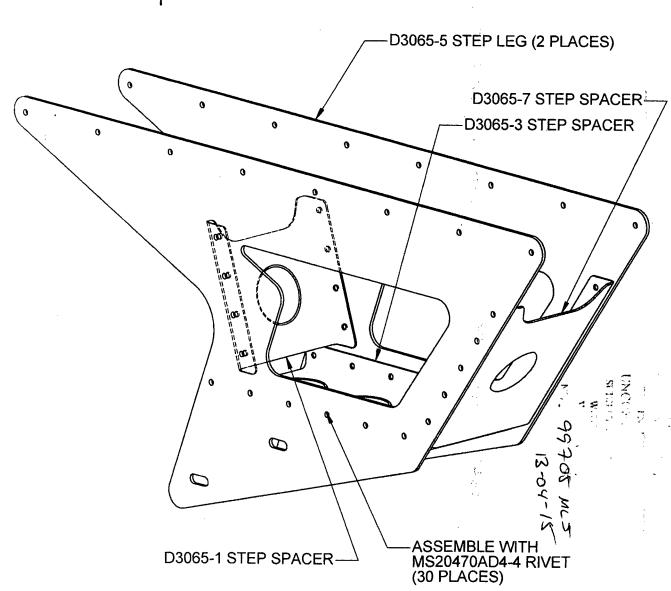
		V 2		
Measured by: TM	Audited by:	27	Prototype Approval:	N/A
Date: (3-5-3	Date:	135.3	Date:	N/A

Rev	Date	Change	Revised by	Approved
Α	03.09.22	New Issue P/O D3065-041	KJ/RF	
В	04.06.15	Added Ø0.128 dimension	KJ/JLM 1.A	2/
. C	06.06.23	Dwg Rev. changed	KJ/JLM 🛠	411



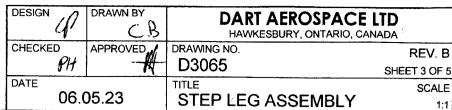
DESIGN	DESIGN DRAWN BY CHECKED APPROVED.		DART AEROSPACE HAWKESBURY, ONTARIO, CAI	- · ·
CHECK		APPROVED	DRAWING NO.	REV. B
	PH	THE	D3065	SHEET 1 OF 5
DATE	06.0	NE 22	TITLE	SCALE
	00.0	05.23	STEP LEG ASSEMBLY	1:2
Α	0:	2.09.11	NEW ISSUE	
В	00	3.05.23	ADD 6061-T6 MATERIAL, ADD SLOTS	TO D3065-5

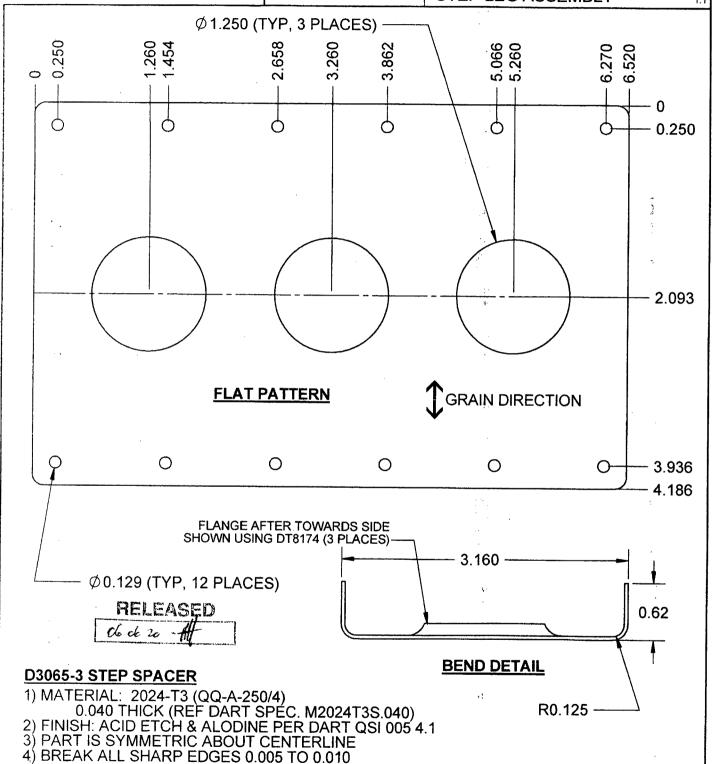
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D3065-041 STEP LEG ASSEMBLY







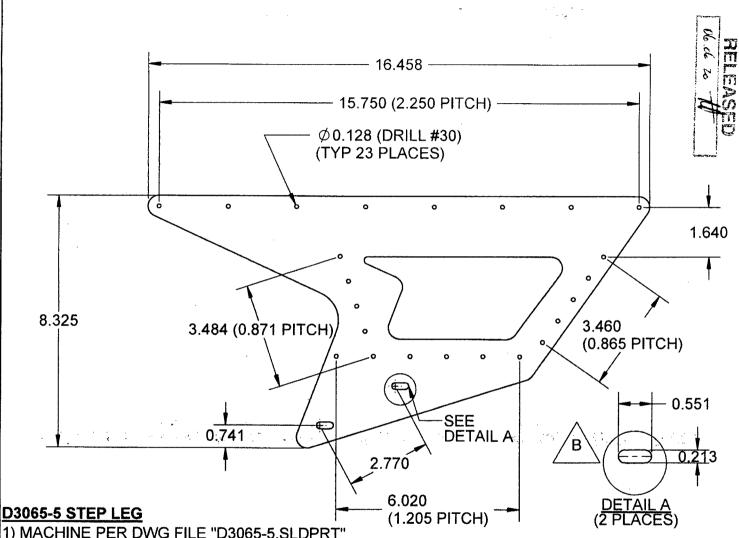
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5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

6) ALL DIMENSIONS ARE IN INCHES

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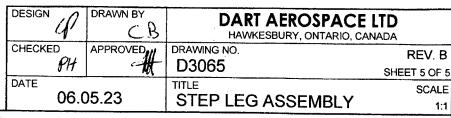
06.05.23 20 0 DRAWING NO. STEP F DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA 0 ASSEMBLY SHEET 4 OF 5 REV. B SCALE

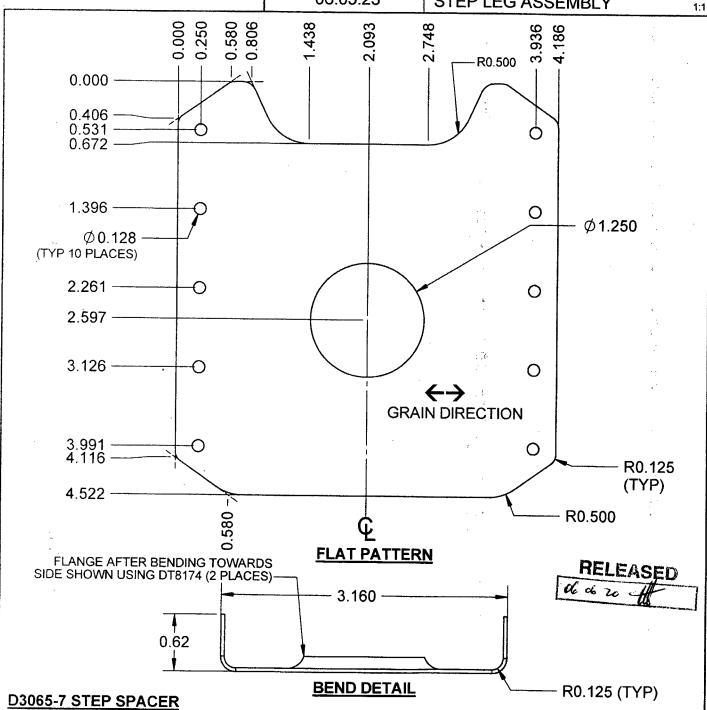


1) MACHINE PER DWG FILE "D3065-5.SLDPRT"
2) MATERIAL: 6061-T6 (PER QQ-A-250/11 OR AMS 4025 OR AMS 4027) 0.080" THICK (REF DART SPEC M6061T6S.080)

5052-H32 (PER QQ-A-250/8 OR AMS 4016) 0.080 THICK (REF DART SPEC. M5052H32S.080) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1 BREAK ALL SHARP EDGES 0.005 TO 0.010 TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE IN INCHES







- 1) MATERIAL: 2024-T3 (PER QQ-A-250/4) 0.040 THICK (REF DART SPEC. M2024T3S.040)
- 2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1

- 3) PART IS SYMMETRIC ABOUT CENTERLINE
 4) BREAK ALL SHARP EDGES 0.005 TO 0.010
 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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